

**Bonneville Power Administration
Fish and Wildlife Program FY99 Proposal**

Section 1. General administrative information

**Hood River Production Program - Pelton Ladder
- Hatchery**

Bonneville project number, if an ongoing project 8902900

Business name of agency, institution or organization requesting funding
Oregon Department of Fish and Wildlife

Business acronym (if appropriate) ODFW

Proposal contact person or principal investigator:

Name Trent W. Stickell
Mailing Address Oregon Department of Fish and Wildlife P.O. Box 59
City, ST Zip Portland, Oregon 97207
Phone (503) 872-5252
Fax (503) 872-5632
Email address trent.w.stickell@state.or.us

Subcontractors.

Organization	Mailing Address	City, ST Zip	Contact Name
NA			

NPPC Program Measure Number(s) which this project addresses.

Response: Measure 703 (f)(5) of the Northwest Power Planning Council's (NPPC) 1987 Fish and Wildlife Program recommended BPA investigate the feasibility of developing artificial production facilities for chinook salmon and steelhead in the Hood River.

NMFS Biological Opinion Number(s) which this project addresses.

This project relates to the Biological Opinion for 1995-98 Hatchery Operations in the Columbia River Basin.

Other planning document references.

WY- Kan -Ush- Me- Wa -Kush -Wit, the Anadromous Fish Restoration Plan, 1995: page 25 - 26; U.S. Forest Service East Fork Hood River and Middle Fork Hood River Watershed Analysis, pages 3-15, paragraph 4; and U.S. Forest Service, West Fork Watershed Analysis, pages 6-7, Botany, Fisheries and Wildlife paragraph; Hood River Production Program - CTWS - M&E, Project #8805303. Contract was converted from a construction project to a production project in October, 1995. Plans are for this project to become part of #8805306.

Subbasin.

Dechutes River / Hood River

Short description.

The fish propagation activities are undertaken in an attempt to mitigate for the losses of fish associated with the construction and operation of federal hydroelectric facilities in the Columbia River Basin. In particular, Bonneville and Powerdale Dams.

Section 2. Key words

Mark	Programmatic Categories	Mark	Activities	Mark	Project Types
X	Anadromous fish		Construction		Watershed
	Resident fish	X	O & M		Biodiversity/genetics
	Wildlife	+	Production		Population dynamics
	Oceans/estuaries		Research		Ecosystems
	Climate		Monitoring/eval.		Flow/survival
	Other		Resource mgmt		Fish disease
			Planning/admin.	X	Supplementation
			Enforcement		Wildlife habitat en-
			Acquisitions		hancement/restoration

Other keywords.

NA

Section 3. Relationships to other Bonneville projects

Project #	Project title/description	Nature of relationship
9301900	HRPP (CTWSRO / ODFW)	Assist with acclimation of 125,000 spring chinook smolts at Parkdale facility; Broodstock collection at Powerdale facility; Adult holding, spawning, and the transfer of spring chinook eggs from the Parkdale facility to Round Butte Fish Hatchery.

8805303	HRPP (CTWSRO) - M&E	Monitoring and evaluating project implementation.
8805304	HRPP (ODFW) - M&E	Monitoring and evaluating project implementation.
9500700	HRPP (PGE) - O&M	Operation and maintenance of Pelton Ladder rearing cells.

Section 4. Objectives, tasks and schedules

Objectives and tasks

Obj 1,2,3	Objective	Task a,b,c	Task
1	Hood River Fish Production Program - Hatchery O&M (Round Butte Hatchery - Incubation and early rearing of spring chinook).	a	Inventory and tray down eggs; Incubate and treat eggs with formalin and/or other approved chemicals to control fungus as needed until hatching.
		b	Categorize eggs from adults infected with Bacterial Kidney Disease.
		c	Shock and separate viable from non-viable eggs and conduct an eyed egg inventory.
		d	Purchase / store fish feed for swimup fry.
		e	Transfer swim-up fry from incubators to small circular tanks.
		f	Feed fish every half hour during daylight hours, 7 days/week.
		g	Clean circular tanks daily.
		h	Treat fish as needed to control diseases.
		i	Purchase feed / store for fingerlings.
		j	Inspect and repair raceways as required.
		k	Pressure wash and paint raceways.
		l	Transfer and inventory fingerlings from circular tanks to raceways.
		m	Feed and monitor fish in raceways.
		n	Administer disease control measures as required in

			fingerlings/smolts.
		s	Contract fish markers to fin clip and ADCWT smolts.t
		t	Fin clip and Coded wire tag all smolts
		u	Continue rearing fish in raceways prior to their transfer to Pelton Ladder Rearing cells.
		v	Complete and submit all required reports to Fish Propagation, Portland.
2	Fish Management - Extended Rearing in Pelton Ladder.	a	Inventory and transport spring chinook juveniles from Round Butte Hatchery raceways to Pelton Ladder.
		b	Feed and monitor fish in the ladder once a day, 5 days/week.
		c	Administer fish disease control measures as required.
		d	Coordinate releases and transfers of Pelton Ladder reared smolts.
		e	Implement releases and transfers of smolts to pre-designated sites.
		f	Complete and submit all required reports to Fish Propagation, Portland.
3	Fish Management - Broodstock Management.	a	Develop an annual broodstock collection plan with CTWSRO.
		b	Estimate needs for adult trapping, transport, holding, and spawning facilities.
		c	Coordinate repair and O&M needs with PG&E.
		d	Trap returning adults at Pelton Ladder.
		e	Inject Adults for BKD.
		f	Transport adults to Round Butte Hatchery adult holding ponds.
		g	Hold adults until spawning, treat for external fungus.
		h	Estimate need and prepare egg incubation facilities.
		i	Purchase necessary supplies and coordinate facility needs with

			PGE.
		j	Spawn adults and transfer eggs to incubation facilities.
		k	Inventory, chemically treat, and tray down eggs.
4	Project Coordination	a	Annual Coordination Meeting
		b	Annual Scope of Work and Budget Meeting.
		c	Complete all required reports and submit to Fish Propagation, Portland.

Objective schedules and costs

Objective #	Start Date mm/yyyy	End Date mm/yyyy	Cost %
1	10/1998	9/1999	45.00%
2	10/1998	9/1999	45.00%
3	10/1998	9/1999	5.00%
4	10/1998	9/1999	5.00%
			TOTAL 100.00%

Schedule constraints.

Continuation of this program may be contingent upon the renewal of the Biological Opinion for 1995 through 1998 Hatchery Operations in the Columbia River Basin.

Completion date.

Ongoing O&M.

Section 5. Budget

FY99 budget by line item

Item	Note	FY99
Personnel	Salaries	\$35,873
Fringe benefits	OPE @ 37%	\$13,273
Supplies, materials, non-expendable property		\$750
Operations & maintenance		\$31,079
Capital acquisitions or improvements (e.g. land, buildings, major equip.)		\$18,750
PIT tags	# of tags:	
Travel		\$1,430

Indirect costs	@ 23%	\$17,494
Subcontracts		
Other	Fin Clipping / Coded-Wire Tagging	\$13,818
TOTAL		\$132,467

Outyear costs

Outyear costs	FY2000	FY01	FY02	FY03
Total budget	\$141,739	\$151,660	\$162,276	\$173,635
O&M as % of total	100%	100%	100%	100.00%

Section 6. Abstract

Response: The purpose of the expansion of propagation in Pelton Ladder is to contribute, in a low cost manner, to the spring chinook salmon production goal outlined in the Deschutes River and Hood River subbasin plans and to the Council's system-wide goal of substantially increasing salmon runs to the Columbia River Basin. Studies will be conducted comparing the following: (1) Pelton Ladder vs. Round Butte Hatchery reared spring chinook; (2) spring chinook reared in the old cells of Pelton Ladder vs. the new cells of Pelton Ladder; (3) survival of 8 fish per pound spring chinook smolts vs. 12 fish per pound at release from both Pelton ladder and the hatchery. All experimental groups will be coded-wire tagged and reared under as identical conditions as possible. A total of 454,000 spring chinook smolts are used in this study annually. Products of the project will contribute to: re-establishment of spring chinook populations in the Hood River Basin; evaluate critical uncertainties about re-establishing anadromous fisheries in the Hood River Basin; the evaluation of new rearing methods that may have implications for production in the Columbia River Basin.

Section 7. Project description

a. Technical and/or scientific background.

Response: These fish propagation activities are undertaken in an attempt to mitigate the losses of fish associated with construction and operation of federal hydroelectric facilities in the Columbia River Basin. In particular, Bonneville and Powerdale Dams.

Measure 703 (f) of the Northwest Power Planning Council's (NWPPC) 1987 Fish and Wildlife Program recommended BPA investigate the feasibility of developing artificial production facilities for chinook salmon and steelhead in the Hood River. In 1991 the NWPPC linked the Hood River portion of the Northeast Oregon Hatchery Project to the Pelton Ladder Project on the Deschutes River. This project, which had converted as unused section of the fish ladder into a rearing facility for spring chinook was to provide broodstock for the project.

The project was started as a low cost production program using, to the extent practicable, existing facilities. The first contract addressed construction and rehabilitation efforts at Pelton Ladder to develop three new extended rearing cells. The cells were completed in September, 1995 and additional spring chinook were transferred to the new cells. Plans are to use the production from two cells to re-establish spring chinook in the Hood River system and to evaluate the effect of the new cells on the existing production (Hood River Production Program-CTWS-M&E, Project #8805303. The contract was converted from a construction project to a production project in October, 1995.

Other significant physical facilities related to this project include (1) the Powerdale Dam Fish Facility which is a state of the art fish trapping and sorting facility. The facility will be used to trap, sort and/or transport all salmonids arriving at Powerdale Dam (2) the Parkdale facility which will be used for adult holding of salmonids and acclimation of spring chinook salmon smolts prior to their release into the Hood River.

Deschutes stock spring chinook were first released into the Hood River subbasin in 1993. In 1997, the spring chinook broodstock for the Hood River Production Program (HRPP) were collected from adults returning to the Powerdale Fish Facility. Hatchery spring chinook destined for the Hood River subbasin are being reared in cells within the modified Pelton ladder. This strategy has demonstrated consistently higher smolt to adult survival than conventional rearing method that are used at other hatcheries in the Columbia River Basin. Spring chinook smolts have been volitionally released into the Hood River subbasin from acclimation facilities since 1996. All future releases are scheduled for pre-release acclimation to improve smolt to adult survival and reduce intra and inter specific competition.

b. Proposal objectives.

1. From returning adult Deschutes stock spring chinook trapped at Powerdale and spawned at Parkdale, receive sufficient green eggs at Round Butte Hatchery to produce 125,000 smolts at a size of 8 fish per pound (15,625 pounds) for release into the Hood River while maintaining the genetic integrity of the stock. All smolts (100%) will be adipose fin clipped and coded-wire tagged.

Achieve a 1 percent smolt to adult survival rate for an adult return to the Hood River subbasin of 1,250 hatchery reared spring chinook.

Re-establish naturally sustaining runs of spring chinook salmon in Hood River, contribute to tribal and non-tribal fisheries, ocean fisheries, and the NWPPC goal of doubling salmon runs in the Columbia River Basin.

2. From returning adult Deschutes stock spring chinook trapped at Pelton and spawned at Pelton, receive sufficient green eggs at Round Butte Hatchery to produce 30,000

hatchery reared smolts at a size of 12 fish per pound (2,500 pounds) and 93,000 Ladder reared smolts at a size of 12 fish per pound (7,750 pounds) for release into the Deschutes River while maintaining the genetic integrity of the stock. All smolts (100%) will be adipose fin clipped and coded-wire tagged. An additional 20,000 Hatchery reared smolts at a size of 8 fish per pound (2,500 pounds) and 187,000 ladder reared smolts at a size of 8 fish per pound (23,375 pounds) funded by PGE will also be released at Pelton as part of the ongoing evaluations. These fish will also be 100% coded-wire tagged.

Compare smolt survival of spring chinook reared in the new vs. old cells in Pelton Ladder, measure adult survival from returns to Pelton Ladder, compare smolt “quality” between ladder reared and Round Butte hatchery reared fish, and compare spring chinook smolts transferred to Pelton Ladder in September vs. November.

Contribute to tribal and non-tribal fisheries, ocean fisheries, and the NWPPC goal of doubling salmon runs in the Columbia River Basin.

c. Rationale and significance to Regional Programs.

Response: The fish production program at Pelton Ladder and Round Butte Hatchery serves as the foundation for the spring chinook supplementation program in the Hood River. Products of the project will contribute to reestablishment of spring chinook populations in the Hood River Basin, evaluate critical uncertainties about re-establishing anadromous fisheries in the Hood River Basin, the NPPC’s Columbia River doubling goal, and the evaluation of new rearing methods that may have implications for production throughout the Columbia basin. Rearing additional fish in Pelton Ladder provides a means of increasing artificial production without incurring the major construction costs associated with building a new hatchery facility.

The program is designed to aid in re-establishing a self-sustaining spring chinook population that is best adapted to the Hood River habitat conditions. Use of hatchery stocks in the subbasin should help to jump start the remnant naturally producing populations and take advantage of the subbasin’s underseeded habitat.

d. Project history

Response: The use of Pelton Ladder for rearing juvenile spring chinook has proven to be a feasible and successful means for increasing adult returns (e.g. smolt to adult survival). Spring chinook smolts rear well in the ladder, apparently benefiting from semi-natural rearing conditions. Smolts reared in the ladder have helped achieve increased adult returns to the Deschutes River subbasin. Survival, or smolt to adult return, to the Deschutes River has averaged 1.6 percent. Survival of the first complete brood of ladder reared Deschutes River spring chinook returning to the Hood River subbasin will not be available until 1999.

Modifications to the rearing facilities in Pelton Ladder were completed in September, 1995 and additional spring chinook salmon were transferred to the new cells. Plans are to use the production from the two cells to re-establish spring chinook salmon in the Hood River system. Studies for Pelton Ladder to evaluate the effect of the new cells on the existing production were implemented in 1996.

Deschutes stock spring chinook were first released into the Hood River subbasin in 1993. In 1997 the spring chinook broodstock for the HRPP were collected from adults returning to the Powerdale fish facility. Annual smolt releases into the Hood River subbasin have numbered approximately 125,000 spring chinook salmon smolts since 1993. Acclimation prior to release has occurred since 1996.

BPA, 1996. Final Environmental Impact Statement.

BPA, (Contract DOE/EIS-0241). Portland, Oregon.

Monthly Hatchery Progress Reports submitted to ODFW Headquarters no later than 15 days after the end of the month.

Annual Operating Plan (AOP). The AOP sets forth details of the proposed fish hatchery operations at Round Butte Hatchery and Pelton Ladder.

- a) Provisions of the Hatchery Management Plan (HMP) approved by the Council in October 1989;
- b) Fish Hatchery Operations Policies required in the Oregon Administrative Rules (OAR) Chapter 635-007-0510 through 0590.

Integrated Hatchery Operation Team (IHOT), Operation plans for anadromous fish in the Columbia River Basin, Annual Report 1995 BPA.

Biological Opinion for Hatchery Operations for 1995 through 1998 in the Columbia River Basin.

Cramer S.P. 1991. Genetic risk assessment of the Hood River component. Northeast Oregon Salmon and Steelhead Facilities.

CTWSRO and ODFW, Cooperators 1997, Annual Progress Report. Hood River and Pelton Ladder evaluation studies. Annual Progress Report of the CTWSRO and ODFW (Projects 89-053-03 and 89-053-04) submitted to BPA, Portland, Oregon.

CTWSRO and ODFW, Cooperators 1996, Annual Progress Report. Hood River and Pelton Ladder evaluation studies. Annual Progress Report of the CTWSRO and ODFW (Projects 89-053-03 and 89-053-04) submitted to BPA, Portland, Oregon.

CTWSRO and ODFW, Cooperators 1995, Annual Progress Report. Hood River and Pelton Ladder evaluation studies. Annual Progress Report of the CTWSRO and ODFW (Projects 89-053-03 and 89-053-04) submitted to BPA, Portland, Oregon.

O'Toole, P., & ODFW, 1991. Hood River Production Master Plan. Final Report of the CTWSRO and ODFW (Project 88-053, Contract DE-B179-89BP00631) submitted to BPA Portland, Oregon.

Smith, M., & CTWSRO, 1991. Final Report of the ODFW and the CTWSRO (Project 89-029, Contract DE-B179-89BP01930) submitted to BPA Portland, Oregon.

ODFW & CTWSRO, September, 1990. Hood River Subbasin Salmon and Steelhead Production Plan.

Jennings, M.D., & Lambert, M., 1996. Acclimating salmonids in the wild near Hood River, Oregon. Proceedings of the 47th Annual Fish Culture Conference. CTWSRO.

e. Methods.

Response: As specified and detailed in the Round Butte Hatchery Annual Operation Plan (AOP), activities for federal Fiscal year 1999 are summarized as follows: spawning of spring chinook adults to occur in early September; ponding of fry to occur in early January; finclipping and coded-wire tagging to occur in July and August; ladder transfer to occur in mid-September and mid-November; release of smolts to occur in April; collection of adult returns and broodstock to occur May-August. Collection of broodstock from 1988-2000 is planned to include collection of adults collected from Hood River for the Hood River smolt program. Deschutes River returns could provide a backup if adults collected from Hood River fall short of total broodstock needs.

On April 8, 1994 NMFS issued ODFW Permit number 899 authorizing the incidental take of threatened and endangered Snake River salmon for the years 1995 through December, 1998. Operation of Round Butte Hatchery and its associated facilities are also included within the most recent Biological Opinion issued by NMFS on April 11, 1995. Round Butte Hatchery operations will comply with all prudent alternatives contained in the Biological Opinion to reduce competition and predation on chinook salmon and sockeye fry. Continuation of this program is dependant upon funding and renewal of the Biological Opinion.

Rearing additional fish in Pelton Ladder provides fishery managers with a low-cost alternative to making major financial investments in new formal hatchery facilities. Adult spring chinook returning from this rearing program will help bolster the dwindling runs of upper Columbia River spring chinook, thus helping to meet the Council's goal for increased production of this species. The Deschutes River Subbasin Plan envisions the need for additional return of hatchery produced spring chinook in order to meet goals for

increased harvest opportunity. The majority of smolts produced in the new cells will be released into the Hood River. Because of unique survival and adult production attributes, low cost, and excellent quality, spring chinook smolts produced in Pelton Ladder represent an unparalleled opportunity to aid in the restoration of the Hood River population. The M&E program conducted by CTWSRO and ODFW personnel, will guide the direction of the Hood River production program.

f. Facilities and equipment.

Response: Round Butte Hatchery is located on the Deschutes River at the base of Round Butte Dam, 10 miles west of Madras, Oregon. Rearing facilities include 10 Burrows ponds, 1 oval pond, 2 adult holding ponds and 30 starter tanks. These facilities are in good condition. Water is supplied to the hatchery from tunnels in the canyon wall that collect seepage from the upstream reservoir (Lake Billy Chinook). Water is not reused in any of the rearing units.

Pelton Ladder is operated as a satellite rearing facility. The facility is a former fish passage ladder which has some sections converted for rearing fish. It is located at the base of Pelton Reservoir (Lake Simtustus), and impoundment on the Deschutes River. Round Butte Hatchery is staffed with 5 FTE's. This includes the personnel required to operate the Pelton Ladder facility.

The equipment used in adult collection, spawning, incubation, rearing, transfers, and release operations is standard equipment found at most fish hatcheries.

Requested Capital Expenditures in FY 1999 include the following items:

- 1) Fire Protection System – A fire protection system is needed at the hatchery residences. This system would include valves and a fire fighting station near each residence so that potential wild fires and house fires could be controlled. This system would be similar to those found at many ODFW hatcheries. The time required for a response from the nearest fire department would be far too long to prevent a wild fire from consuming the entire residence area. The residences are surrounded by grasslands and junipers with access to the public. Estimated cost: BPA share = \$2,500.
- 2) Early Rearing Tank Enclosure – The construction of a enclosure to provide protection from the elements (wind, snow, rain, and sunlight) is needed for the protection of 24 fiberglass circular tanks and the personnel while working in this area. Hazardous conditions persist for personnel working in the area when the weather is very inclement causing significant safety concerns. Algae growth would be significantly reduced if the tanks were kept out of direct sunlight. Estimated cost: BPA share = \$6,250.
- 3) Adult Spawning Facility Improvement –Expand the existing Pelton spawning area. The present floor space measures only about 10 feet by 10 feet

which is too small to enable a crew of 8 to 10 people to work all at once. Workers trip all over one another while trying to do their work. The revamped area also needs to be protected from the inclement weather conditions. Estimated cost: BPA share = \$2,500.

- 4) Heat Pumps – Replace existing electric baseboard heaters in the hatchery residences with energy efficient heat pumps. Estimated cost: BPA share = \$6,250.
- 5) Fork Lift – A fork lift is needed at the facility to unload semi-loads of fish feed, moving containers of fish from one area to another, and for lifting heavy equipment used in hatchery operations on a regular basis. We propose to obtain a surplus fork lift from the government that is in good working order. Estimated cost: BPA share = \$1,250.

g. References.

Response: CRITFC, 1996. WY-KAN-USH-MI WA- KISH-WIT. The Columbia River Anadromous Fish Restoration Plan of the Nez Perce, Umatilla, Warm Springs, and Yakima Tribes. Portland, Oregon. Cited Volume II, page 25.

CTWSRO & ODFW as Cooperators, 1997. Annual progress report. Hood River and Pelton Ladder Evaluation Studies. Annual Progress Report of the CTWSRO & ODFW (Projects 89-053-03 and 89-053-04) sent to BPA, Portland, Oregon.

Department of Natural Resources, CTWSRO, October, 1993. Hood River/Pelton Ladder Master Plan Agreement. BPA, Portland, Oregon.

DOE & BPA (U.S. Department of Energy & BPA), Hood River fisheries project. Draft EIS (DOE/EIS-0241). BPA, Portland, Oregon.

DOE & BPA (U.S. Department of Energy & BPA), Hood River fisheries project. Final EIS (DOE/EIS-0241). BPA, Portland, Oregon.

Jennings, M.D., & Lambert, M. Acclimating salmonids in the wild near Hood River, Oregon. January, 1996. Proceedings of the 47th Annual Northwest Fish Culture Conference. Victoria, BC. V8v 1x4, Canada. pp. 38-44.

NPPC, 1994. Columbia River Basin Fish & Wildlife Program. Adopted November 15, 1982. Amended December 14, 1994. NPPC, Portland, Oregon.

ODFW, 1995. Aquatic Inventories Project: Physical Habitat Surveys, Fish Surveys, Hood River Basin.

ODFW & CTWSRO, September, 1990. Hood River Production Master Plan. Final report of the CTWSRO & ODFW (Project 88-053, Contract DE-BI79-89BP00631) sent to BPA Portland, Oregon.

IHOT, 1995. Operation Plans for Anadromous Fish Production Facilities in the Columbia River Basin. Vol. II, Oregon. pp. 229-243.

Section 8. Relationships to other projects

Response: The HRPP is composed of five separate contracts designed to increase production of wild summer and winter steelhead and to re-establish spring chinook within the Hood River subbasin. The five separate contracts, approved by the NPPC and funded by BPA, primarily provide funding for three broad categories of activities. These include engineering, implementation, monitoring, and evaluation studies. Funding for the engineering component of the HRPP provides for the design and construction of facilities at Powerdale Dam, Parkdale, and Oaksprings Hatchery that are needed to implement the HRPP. Funding for implementation provides for broodstock collection, holding, fish transport spawning, rearing, marking, and tagging. Funding for monitoring and evaluation studies provide for the evaluation of the HRPP and any interaction the hatchery program may be having on wild fish populations.

In section 7 of the Columbia River Basin Fish and Wildlife Program, the NPPC reiterated its determination that implementation of production and habitat activities be fully coordinated (NPPC, 1994). In 1996, an Environmental Impact Statement was completed for the HRPP cooperatively by BPA, CTWSRO, and ODFW. A record of decision was completed October 10, 1996 by Randy Hardy (BPA Administrator); and supports NPPC goals. The decision was to proceed with Alternative 1 because it best met the needs and purposes stated in the Final EIS and has the best potential for re-establishing or re-building and sustaining populations of anadromous salmonids in the Hood River subbasin with a combination of supplementation, habitat improvement, and a monitoring and evaluation program (DOE and BPA, 1996).

Information obtained on juvenile rearing and migration, adult survival, and recreational fishing is shared with other projects, fish managers, and hatcheries. Information on rearing and survival data is used by state and federal agencies to improve hatchery programs throughout the Columbia River Basin.

Project staff are involve local schools, organizations, other agencies, and other scientists in their activities, either through field opportunities, classroom lectures, sharing of expertise, equipment, information, or obtaining permission for specific field work. Staff also works very closely with PGE personnel on a daily basis.

Section 9. Key personnel

Response:

Hatchery Manager: Bill Nyara; FTE = 0.25
Hatchery Foreman: Jim Struck, FTE = 0.25
Hatchery technician: Paul Brown, FTE = 0.25
Hatchery Technician: David Welch, FTE = 0.25

**Round Butte Fish Hatchery Manager
Bill Nyara**

Education:

1975 - A.S. Fisheries Technology, Mt Hood Community College, Gresham, Oregon..

Experience:

3/87 –Present Hatchery Manager, ODFW, Round Butte Fish Hatchery, 6825
S.W. Belmont Ln. Madres, Oregon.

Primary responsibilities are to supervise and effectively plan, coordinate, direct, and organize the operations of Round Butte Fish Hatchery. And the Pelton Ladder Satellite rearing facility. The hatchery's annual fish production program consists of 454,000 spring chinook salmon smolts, 162, 000 summer steelhead smolts, 100,000 kokanee fingerlings, and 20,000 legal-sized rainbow. Develop and administer an annual budget of approximately \$350,000 from two funding sources, BPA and PGE. Develop maintenance and improvement plans for the hatchery, ladder, trap and residences.

1/85 – 3/87 F&W Manager 1, Siletz Fish Hatchery, ODFW.
4/83 – 1/85 F&W Technician 2, Round Butte Fish Hatchery, ODFW.
5/80 – 4/83 F&W Technician 1, Klamath Fish Hatchery, ODFW
9/79 – 5/80 F&W Tech 1, Sandy Fish Hatchery, ODFW
6/75 – 9/79 Full-time seasonal laborer, Marion Forks Fish Hatchery, ODFW.
9/74 – 6/75 Part – time laborer, Sandy Fish Hatchery, ODFW.

Section 10. Information/technology transfer

Response: Refer to Project #8805304ODFW M&E and #8805303 ODFW & CTWSRO. The project's overall performance will be assessed through completion of the specific measurable objectives, other measures include annual reports, completion of tasks identified in the annual work statements, number of fish tagged/marked and released, numbers of adult spring chinook returning, commercial and sport fishing benefits provided and the achievement of restoring natural runs of adults into the Hood River subbasin.

Data will be summarized and analyzed and reported in the M&E Annual and other special reports. Information is communicated to fish management staff through monthly and quarterly reports, annual reports, and various research reviews, fish propagation meetings, and other forums such as the American Fisheries Society meetings and the Pacific Northwest annual Fish Culture Conference workshops. Adult fish collection and fish production information is entered and maintained on ODFW's Hatchery Management Information System (HMIS). Relevant information is also shared with co-managers in the Columbia River Management Plan's Production Advisory Committee (PAC) forum.